

Mr. Boulenger pointed out that the neck, which exactly equalled the shell in length, was not as represented in the single stuffed specimen in the British Museum, without any folds, but that the skin was loose, with numerous folds, a pair of very strong lateral ones extending from the sides of the head down almost the entire length of the neck.

The tortoise, although very lively, is extremely shy, and on one's approach has the peculiar habit of withdrawing its head, standing as high up as possible on its hind limbs, and bending over until the fore part of the carapace almost touches the ground. The purpose of this performance seems to be in order to protect the head and neck which, owing to the peculiar shape of the front part of the shell, remain completely exposed on withdrawal.

The shell in this species being of extraordinary thinness and lightness, the creature is able to progress at a pace which, compared with that of the other tortoise in the collection, is remarkable for its rapidity.

Helminthes of the British Antarctic Expedition, 1910-1913.*

Dr. R. T. LEIPER, M.B., F.Z.S., and Surgeon E. L. ATKINSON, R.N., gave a lantern demonstration of the Helminthes collected by the British Antarctic ('Terra-Nova') Expedition, 1910-1913. In all, thirty-seven species of Helminthes were collected by Surgeon Atkinson on the voyage of the 'Terra-Nova,' and whilst a member of the shore party. One species was a free-living Nematode, *Leptosomatium setosum*, the remainder were parasitic. Of these latter,

8 species had been recorded from the Antarctic zone, viz. :—

In *Leptonychotes weddelli*:

Ascaris osculata Rud.

Ascaris radiata v. Linstow.

Ascaris rectangula v. Linstow.

Corynosoma antarcticum Rennie (= *C. hamanni* v. L.).

Dibothriocephalus mobilis Rennie & Reid.

Dibothriocephalus coatsi Rennie & Reid.

Diphyllobothrium perfoliatum Railliet & Henry.

In *Aptenodytes forsteri*:

Anomotenia zederi (Baird).

Free-living Nematode:

Leptosomatium setosum v. Linstow.

* From the Helminthological Department of the London School of Tropical Medicine.

3 species previously found in the Arctic zone are now recorded from the Antarctic for the first time, viz. :—

In *Megaptera longimana* :

Filaria crassicauda Creplin.

Echinorhynchus turbinella Dies.

In *Leptonychotes weddelli* :

Ogmogaster plicatus (Creplin). This species is a parasite of whales in northern seas.

1 species recorded outside the Antarctic zone has now been found within the Circle, viz. :—

In *Megalestris maccormicki* :

Tetrabothrius cylindraceus Dies.

15 species found within the Antarctic circle are new, viz. :—

NEMATODA.

KATHLEENA SCOTTI, sp. n., from *Diomedea melanophrys*.

An Ascarid nearly related to *Ascaris ocellata* which is designated type, *infra*, of a new genus *Kathleena*.

Whitish, firm, round-worms. Male 15×0.9 mm. Female the same or slightly larger. Interlabia very large, pentagonal. Short-curved œsophageal appendage 0.2 mm. Intestinal cæcum 1.8 mm. Œsophagus 2.53×0.4 mm. Spicules 3×2.7 mm. Tail of male terminates in blunt digitate process.

ACANTHOCEPHALA.

ECHINORHYNCHUS CAMPBELLI, sp. n., from *Trematomus bernacchii*.

Male 9 mm. Female 10 mm. Thin-walled. 2.5 mm. broad. Proboscis 2 mm. Hook-bearing rostellum 0.5 mm. Hooks 14 linear series of 8 hooks each. Testes oval, occupy the third fourth of the body.

ECHINORHYNCHUS RENNICKI, sp. n., from *Trematomus bernacchii*.

Male 3.7 mm. Female 4 mm. Proboscis 1 mm. Hook-bearing rostellum 0.3 mm. Hooks in 12 linear series of 6 each. Those of alternate rows are in line transversely. Each hook protrudes from a transparent cuticular lapel. Lemnisci are long and slender.

ECHINORHYNCHUS DEBENHAMI, sp. n., from *Trematomus bernacchii*.

Male 2.2 mm. Female 2.2 mm. Sickle-shaped. Stout, cylindrical rostellum with hooks in 12 linear series of 6 each. Lemnisci bag-like, extending but little behind proboscis. Testes large, occupying anterior half of body-cavity, deeply lobed. Female crowded with eggs.

TREMATODA.

HEMIURUS OATESI, sp. n., from *Trematomus bernacchii*.

Length 2 mm. Abdomen present but retracted wholly. Skin sharply striated. Ventral sucker 0.34 mm. diam., twice that of oral sucker. Enormous muscular seminal vesicle. Yolk-masses compact, lobulated. Eggs exceedingly numerous and small.

APONURUS BOWERSI, sp. n., from *Trematomus bernacchii*.

Length 1 mm. Oral sucker has characteristic fleshy lip along dorsal rim only. Gut-branches greatly dilated extend to posterior end of body. The yolk-glands are peculiar: two halfmoon-shaped solid masses lying in apposition immediately in front of the ovary.

LEPORDORA GARRARDI, sp. n., from *Trematomus bernacchii*.

Flat fleshy forms 3×0.9 mm. Brownish colour due to numerous yolk-glands. Skin covered with delicate spines. Ventral sucker 0.27 mm., oral sucker 0.37 mm. Stout pyriform pharynx 0.2 mm. Eggs few but large. Testes tandem. Gut-branches wide and extending to posterior end of body.

PODOCOTYLE PENNELLI, sp. n., from *Trematomus bernacchii*.

Small forms tapering from large pouting ventral sucker. Armed cirrus extends to posterior level of the ventral sucker. Yolk-glands large and discrete. Testes smooth, tandem. Eggs large, with flat knob-like protrusion at one pole.

ALLOCREADIUM FOWLERI, sp. n., from *Trematomus bernacchii*.

Immature forms 0.74 mm. in length, 0.4 mm. broad. Skin smooth. Cylindrical excretory vesicle with fine black pigment granules. Large ventral sucker 0.36 mm. Three small round bodies 0.1 mm. in diam. represent the genital glands.

CESTODA.

DIBOTHRIOCEPHALUS LASHLEYI, sp. n., from *Leptonychotes weddelli*.

3 to 4 cms. Young segments quadrate. Mature segments 3 to 4 times longer than broad. Head 1.2 mm. long \times 0.77 mm. broad. Suckers, situated laterally, are almost circular and do not extend much down the head. Eggs commence at 14th segment, 0.06 mm. The testes extend inward in each segment in single series of three.

DIBOTHRIOCEPHALUS ARCHERI, sp. n., from *Leptonychotes weddelli*.

6 to 12 cms. Large square head 2.04 mm. broad. Lips of the suckers folded inwards. Eggs start at 57th segment and measure 0.07 mm. Testes scattered diffusely.

DIPHYLLOBOTHRIUM RUFUM, sp. n., from *Leptonychotes weddelli*.

3 to 6 cms. The head is characteristically pigmented brick-red around the base of the suckers. Head measures 1.64×1.44 mm.

Suckers are dorsal and ventral. The segments overlap markedly as in *D. perfoliatum*. Eggs measure 0.025 mm.

ORIANA WILSONI, gen. et sp. n., from *Balenoptera borealis*.

Segments all immature. Strobila 13 cms. Head discoidal, 3 mm. in diam., quadrate in outline, 4 round suckers present terminally. Neck very slender. Testes arranged in two definite groups of 7-8 and 17-18. Near to *Diplobothrium*.

TETRABOTHRIUS WRIGHTI, sp. n., from *Pygoscelis adeliae*.

Strobila 2.2 mm., but none contains eggs. Head 0.4 mm. in length. Testes constantly twelve, auricular appendages of suckers well developed.

ANTHOBOTHRIMUM WYATTI, sp. n., from *Trematomus bernacchii*.

Small scolices, unsegmented. Four large auricular appendages each occupied by two tandem suckers. A bright pigmented band crosses the neck in the living state.

9 species were collected in Tropical and Temperate Zones during the voyage of the 'Terra-Nova.' Of these three have been recorded previously, viz. :—

ABOTHROS CARCHARIAS and a larval TETRARHYNCHUS from *Carcharias* sp., and TETRABOTHRIUS HETEROCLITUS Dies. from *Puffinus cinereus*.

Five Cestodes, all of the genus TETRABOTHRIUS, are new, viz. :—

TETRABOTHRIUS CREANI, sp. n., from *Æstrelata trinitatis* and *Æ. arminjoniana*.

Strobila 4.5 cms. Head 0.84 mm. broad, carries four suckers but no rostellum. Testes are numerous. Yolk-gland large. Cirrus 0.06 mm.

TETRABOTHRIUS CATHERINÆ, sp. n., from *Æstrelata trinitatis*.

Stouter than preceding. Head comparatively small. Suckers most on top of head. Segments overlap succeeding segments by one-third. Testes 30 to 45, bunched in middle of segment. Genital organs very characteristic. Cloaca divided into outer and inner portions. There is a large pyriform seminal vesicle internal to the cirrus.

TETRABOTHRIUS AICHESONI, sp. n., from *Æstrelata trinitatis*.

Strobila 3 cms. More slender than preceding. Segments more uniform, only overlap slightly. Testes arranged in three distinct sets, are very numerous, far in excess of those of the previous forms.

TETRABOTHRIUS PRIESTLEYI, sp. n., from a Frigate-bird (*Fregata aquila* or *F. ariel*).

Strobila 10 cms., excessively slender with large tulip-like heads. Testes 17-20. Near to *T. pelecani* Fuhrmann.

TETRABOTHRIUS NELSONI, sp. n., from *Phæbetria palpebrata*.

Fragments only. Head absent. Testes 6 to 8, clumped at opposite side of segment from the cirrus.

One Nematode is new and the type of a new genus:—

TERRANOVA ANTARCTICA, from *Mustelus antarcticus*.

A single Ascarid female 32 mm. long. Three squat fleshy lips with paired anterior lobes. No labia intermedia. Œsophagus without appendage. The intestine has a long cæcum. The anus lies at the base of a deep sulcus.

The following new genera are proposed:—

CRASSICAUDA, gen. n., for *Filaria crassicauda* (Creplin), t. sp.

TERRANOVA, gen. n., for *Terranova antarctica*, sp. n., t. sp.

An Ascarid with three large simple lips. No interlabia. Œsophagus simple. Gut with anterior cæcal prolongation. No oesophageal appendage.

KATHLEENA, gen. n., for *Ascaris osculata* Rud., t. sp.

An Ascarid with three large fleshy lips and three interlabia. Œsophagus has a solid appendage and the intestine has an anterior cæcal prolongation. In this genus may also be placed *Ascaris radiata*, *A. rectangula*, and *K. scotti*.

ORIANA, gen. n., for *Oriana wilsoni*, sp. n., t. sp. (*vide supra*).

Cyclophyllid with large quadrate discoidal head carrying four round suckers. Rostellum absent.

The types of the above forms are in the British Museum (Natural History), London. An illustrated account of the collection will appear in one of the zoological volumes of the results of the Expedition, to be published by the Trustees of the Museum.

March 3, 1914.

Prof. E. W. MACBRIDE, M.A., D.Sc., F.R.S., Vice-President.
in the Chair.

Mr. C. TATE REGAN, M.A., F.Z.S., reported on the fresh-water fishes from Dutch New Guinea collected by the British Ornithologists' Union and the Wollaston Expeditions. *Symbranchus bengalensis* was obtained for the first time in New Guinea. The collections included examples of two species of Melanotæniine Atherinids, and Mr. Regan had revised this group of fishes.

This paper will be published in the 'Transactions.'